

**REMARKS**

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-4, 6 and 8-18 are now pending, wherein claims 17 and 18 have been added. Support for new claim 17 can be found at least at Fig. 1 of the present application and support for new claim 18 can be found at least at page 5, lines 13-22 of the present application.

Claims 1-4, 6 and 8-18 are rejected under 35 U.S.C. § 103(a) as being obvious in view of the combination of U.S. Patent No. 6,159,434 to Gonjo et al. ("Gonjo"), German Patent Document No. DE 197 43 673 ("Schuessler") and U.S. Patent No. 5,316,747 to Pow et al. ("Pow"). This ground of rejection is respectfully traversed.

The combination of Gonjo, Schuessler and Pow does not render Applicant's claim 1 unpatentable because the combination does not disclose or suggest all of the elements of claim 1. For example, the combination does not disclose or suggest "insulating plates are provided between the [*upper and lower*] end plates and layers which are respectively adjacent to the end plates."

Gonjo discloses a flat plate stacked-type fuel reforming apparatus and Schuessler discloses an apparatus for producing hydrogen that includes a plurality of stacked layers of catalyst material. The Office Action acknowledges that Gonjo and Schuessler each do not disclose or suggest insulating plates arranged in the manner recited in Applicant's claim 1.

Pow is cited to remedy this deficiency of the combination of Gonjo and Schuessler. Pow discloses a selective oxidizing reactor 10, including a first end plate 11, a reactor containment shell 12, fin block 13 and second end plate 15. (Fig. 1). Fin block 13 is placed inside of containment shell 12. (Col. 11, lines 21-22). First and second end plates 11 and 15 are arranged to laterally surround containment shell 12. (Fig. 1).

The Office Action states that end plates 11 and 15 correspond to the end plates recited in Applicant's claim 1. Applicant's claim 1, however, recites *upper and lower* end plates, and not end plates arranged laterally to the system as are the first and second end plates 11 and 15 of Pow. Accordingly, Pow cannot disclose or suggest "insulating plates are provided between the end plates and layers which are respectively adjacent to the end plates" where such end plates are *upper and lower* end plates, as recited in Applicant's claim 1.

The Office Action also states that containment shell 12 corresponds to the insulating plates recited in Applicant's claim 1. However, containment shell 12 is not a *plate*, as are the insulating *plates* recited in Applicant's claim 1. Moreover, containment shell appears to be a single component, and hence, cannot be considered the same as the plates recited in Applicant's claim 1.

Therefore, even if one skilled in the art would have been motivated to combine Gonjo, Schuessler and Pow in the manner discussed in the Office Action, such a combination would not disclose or suggest "insulating plates are

provided between the [*upper and lower*] end plates and layers which are respectively adjacent to the end plates,” as recited in Applicant’s claim 1.

Moreover, due to the different structures of the systems of Gonjo and Schuessler compared to that of Pow, one of ordinary skill in the art would not have been motivated to combine Gonjo and Schuessler with Pow in the manner described in the Office Action. In particular, Gonjo and Schuessler are directed to systems that include stacked plates (Gonjo) or layers (Schuessler). In contrast, Pow is directed to a system that includes a fin block 13 inside of containment shell 12. There is no disclosure or suggestion in Gonjo, Schuessler or Pow that a containment shell that is used for a fin block should be used with a stacked plate or layer structure such as those disclose by Gonjo and Schuessler. Accordingly, it is respectfully submitted that one skilled in the art would not have been motivated to include the structures disclosed by Gonjo and Schuessler in the containment shell of Pow as described in the Office Action.

Because the combination of Gonjo, Schuessler and Pow does not disclose or suggest all of the elements of Applicant’s claim 1 and one of ordinary skill in the art would not have been motivated to combine Gonjo and Schuessler with Pow in the manner described in the Office Action, this combination cannot render Applicant’s claim 1 unpatentable.

Claims 2-4, 6, 8-12 and 15 are patentably distinguishable over the combination of Gonjo, Schuessler and Pow at least by virtue of their dependency from claim 1.

The combination of Gonjo, Schuessler and Pow does not render Applicant's claim 13 unpatentable because the combination does not disclose or suggest all of the elements of claim 13. Specifically, the combination does not disclose or suggest the insulating plates and insulation layer of Applicant's claim 13.

Similar to Applicant's claim 1, Applicant's claim 13 recites that the insulating plates are arranged between upper and lower end plates. Accordingly, the combination of Gonjo, Schuessler and Pow does not render Applicant's claim 13 unpatentable for similar reasons to those discussed above with regard to Applicant's claim 1.

To reject Applicant's claim 13 it appears that the Office Action is asserting that containment shell 12 of Pow discloses the insulating plates and insulation layer recited in Applicant's claim 13. However, Applicant's claim 13 recites that the system includes insulating plates *and* an insulation layer, whereas containment shell 12 is a single component. Accordingly, if this ground of rejection is maintained, Applicant respectfully requests that the next Patent Office communication explain how containment shell 12 can disclose the insulating plates and insulation layer, which are separately recited elements in Applicant's claim 13.

Claims 14 and 16 are patentably distinguishable over the combination of Gonjo, Schuessler and Pow at least by virtue of their dependency from claim 13.

For at least those reasons stated above, it is respectfully requested that the rejection of Applicant's claims 1-4, 6 and 8-16 as being obvious in view of the combination of Gonjo, Schuessler and Pow be withdrawn.


New claims 17 and 18 respectively depend from claims 1 and 13, and are, therefore, patentably distinguishable over the combination of Gonjo, Schuessler and Pow at least by virtue of their dependency from claims 1 and 13.

All outstanding rejections have been addressed. It is respectfully submitted that the present application is in immediate condition for allowance. Notice to this effect is earnestly solicited. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #011210.49153).

Respectfully submitted,

August 1, 2006

  
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